## ABSTRACT

Bachelor's thesis: 85 p., 16 fig., 9 tabl., 2 appendixes, 13 sources.

Topic of the research: «Analysis of clients solvency using nonlinear probabilistic models».

Actuality of theme: increasing growth in the economy steadily increasing demand for loans. However, increasing the proportion of defaults borrowed funds. In addition, the economic crisis negatively affect repayment. Therefore, the theme of the analysis and evaluation of the creditworthiness of customers before a loan is relevant nowadays.

The research object is a sample of 10437 enterprises that received credit. The sample is a set of parameters on which the prediction is performing.

Subject of the research is to build scoring models for solving the problem of forecasting the payment or non-payment by the borrower of the loan.

Aim of the study consists in development of software for assessing the solvency of individuals based on logistic regression.

Research methods: logistic regression model. Software implementation of the method performed in Python 3.5 environment. A prediction using discriminant analysis performed in SPSS to compare the results.

Results: A software product that forecasts the solvency of enterprises. Performed the comparison with the results in SPSS.

LOGISTIC REGRESSION, SOLVENCY, SCORING MODELS, ERRORS, COMMON ACCURACY